Pollution Prevention Practices in Auto Body and Paint Shops

Wastewater Management

Almost all auto body repair and paint shop activities have the potential to release pollutants to surface waters. These activities include surface preparation, wet and dry sanding, painting, vehicle washing, floor cleaning, and product and waste storage. Pollutants that may be generated in the shop include:

- heavy metals like cadmium, chromium, lead, nickel, and zinc from sanding operations;
- oil, grease, and coolant removed from vehicles;
- toxic chemicals from cleaners, strippers, solvents, and paints;
- and soaps from car washing.

In most areas of California, water flows untreated from storm drains directly to streams, lakes, bays, and the ocean. Water discharged to the sanitary sewer is not treated to remove chemical contaminants and it is illegal to discharge hazardous waste to the sanitary sewer. Contaminated water released from auto body shops can harm aquatic life and sensitive ecosystems as well as affect drinking water supplies. You can protect the environment and prevent expensive storm water violations by implementing the following pollution prevention and best management practices in your shop.

Prevent spills inside and outside the shop

Spill prevention helps to reduce product and disposal costs, and to maintain compliance with stormwater regulations.

- Keep containers closed, use secondary containment for hazardous materials storage, and inspect for leaks.
- Store hazardous materials away from sanitary sewer and storm drains.
- Keep trash containers and
 - dumpsters closed and inspect for leaks.
- Inspect vehicles for leaks and use drip pans as needed, especially for vehicles stored outside.
- Clearly mark all indoor drains.



- Stencil "No Dumping" near storm drains
- Install and maintain storm drain protection devices, such as filter inserts.
 - o Use filter inserts as "last line of defense" for spills
 - Storm drain inserts should be used in combination with the measures listed above. The use of these filters should not be your only spill management practice

Keep the floor clean

It is important to maintain clean floors. This prevents tracking of pollutants outside or to other areas of the shop and prevents waste and spillage from entering the storm drain.

- Use a dry floor cleanup method such as a filtered vacuum system for dust and handle small liquid spills right away with rags or a squeegee.
- Maintain and use emergency spill kits for larger solvent and paint spills.
- Clean up dust and other waste at the end of each task.
- Seal the shop floor with epoxy or other sealant. This lasts for years and doesn't absorb spills so it makes clean-up easier and saves time cleaning.

For more information on spill prevention and dry floor clean up, see the DTSC Fact Sheet "Floor Clean Up" in the Pollution Prevention for Auto Repair and Fleet Maintenance Toolkit. http://www.dtsc.ca.gov/PollutionPrevention/VSR/upload/FloorCleanup02.pdf

Control wet and dry sanding waste

Sanding waste may contain toxic metals that can contaminate surface waters. It should not be tracked or washed out of the shop to gutters, streets, or storm drains whether or not it is hazardous waste.

- Conduct all sanding indoors.
- Collect sanding waste at the source to prevent it from being tracked to other areas of the shop or outside the shop.
- Dry sanding tips:
 - Use vacuum sanding equipment to collect dust as it is generated;
 - When block sanding, clean up with a portable vacuum cleaner as each task is completed.
- Wet Sanding tips:
 - Use a spray bottle to squirt water onto the panel and collect the waste in a drip pan;
 - Collect the waste in a clarifier plumbed to the sanitary sewer; and
 - Inspect the clarifier and remove sludge regularly.

For more information on sanding waste management, see the DTSC Fact Sheet "Sanding Waste Management for Auto Body Repair and Paint Shops."

Provide employee training

Training emphasizes what is required of the employees and gives them the tools to accomplish what is expected of them. You also demonstrate your commitment to employee health and safety and pollution prevention.

- Provide training on good housekeeping, safe hazardous materials handling, materials management, spill prevention, spill response, emergency procedures, and waste water management.
- Conduct refresher training at routine safety meetings.
- Encourage employees to attend outside training, such as compliance and P2 workshops given by local agencies.

Promote good housekeeping in your shop

As a shop owner or operator, you can make a difference in keeping your shop clean. Spill prevention and clean up procedures should be a priority for shop technicians. Good housekeeping practices will help prevent contaminants from entering storm water drains and groundwater.

- Build standard housekeeping procedures into the work schedule by providing scheduled clean up time on the clock. Assign specific tasks to each person to complete during their last 15 minutes of work.
- Provide monthly or quarterly team or individual awards to workers who suggest new ideas or reach particular goals.

Manage car wash water

Car wash water is contaminated with residue from surface preparation and cleaning, including solvents, soaps, and surfactants. Do not discharge car wash water to storm drains.

To avoid runoff into the storm drains:

- Wash in areas where waste water flows AWAY from the storm drain:
- Wash cars in a bermed and covered wash area;
- Install a contained wash pad plumbed to the sanitary sewer: or
- Use a portable wash pad and pump waste water to sanitary sewer drain;
- Install a closed loop water recycling system to reduce water use and trap contaminants:
- Install a clarifier to collect wash water before it discharges to the



sanitary sewer. Inspect and service the clarifier regularly;

 Contract with a nearby car wash that uses water recycling equipment to wash your cars.

Vendor contact information

(Other vendors may provide similar or identical products and services. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying any government approval, endorsement, or recommendation.)

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Advanced Environmental Solutions, Inc.	http://www.advenvironmental.com	(800) 275-3549	Spill prevention, drain mats, wash water recycling
Freytech Inc.	http://www.freytech.com	(305) 538-3101	Car wash and water recycling
GET, IncGlobal EnviroScience Technologies	http://www.get-inc.com	(800) 600-8482	Wash water recyclers
RGF Environmental	http://www.rgf.com	(800) 842-7771	Wash water recyclers
OnSite Waste Management	http://www.onsitewastemgmt.com	(800) 255-6073	Vacu-Boom wastewater capture system
Hydo Engineering Inc.	http://www.hydroblaster.com	(800) 247-8424	Portable wash pad, wash water reclamation
California Cleaning Systems	http://www.cacleaning.com	(877) 866-6506	Wash water treatment, containment
Revel Environmental Manufacturing	http://www.remfilters.com	(888) 526-4736	Storm drain filter inserts; drain and curb markers

For more detailed information on storm water P2, see the California Storm water Quality Association's (CASQA) Storm Water BMP Handbook "Automotive Service-Body Repair." http://www.cabmphandbooks.com/Documents/Industrial/Automotive BodyRepair.pdf

Hazardous Waste Regulatory Requirements

For information on regulatory requirements contact your local <u>CUPA</u> online at http://www.dtsc.ca.gov/InformationResources/local_contacts.cfm or contact the <u>Department of Toxic Substances Control (DTSC)</u> at (800) 728-6942, http://www.dtsc.ca.gov/ContactDtsc/duty_officers.cfm

To get an EPA ID number, contact:

DTSC Generator Information Services Unit (916) 255-1136 (800) 618–6942

For additional information on auto body and paint shop pollution prevention practices and a list of available publications contact:

DTSC
Office of Pollution Prevention and Technology Development
P.O. Box 806
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(800) 700-5854
http://www.dtsc.ca.gov/PollutionPrevention/index.cfm

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